

OK

INFORMATION REPORT INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

This material contains information affecting the National Defense of the United States within the meaning of the Espionage Laws, Title 18, U.S.C. Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

S-E-C-R-E-T

50X1-HUM

COUNTRY USSR (Black Sea)

REPORT

SUBJECT 1. Soviet Naval Vessels and Facilities in the Black Sea Area
2. Target Firing Exercise Near Odessa
3. Landing Craft Observed at Novorossiysk

DATE DISTR.

23 May 1960

NO. PAGES

2

50X1-HUM

REFERENCES

DATE OF INFO.

PLACE & DATE ACQ.

SOURCE EVALUATIONS ARE DEFINITIVE. APPRAISAL OF CONTENT IS TENTATIVE.

The following reports on the Black Sea area

50X1-HUM
50X1-HUM

Att.No. Subject

1

report on observations in the following areas of the Black Sea: Novorossiysk,

Odessa,

and the Kerch Strait.

The report includes the following: observations of naval vessels, merchant vessels, and port facilities; locations of searchlights and radar installations; two sketches of a probable patrol boat at Novorossiysk; annotated sketch maps of Sukhoy Liman, Mys Bolshoy Fontan (N 46-23, E 30-45), and the harbor of Novorossiysk; a sketch of a military target at Novorossiysk; and a sketch of a radar antenna located on the coast between Mys Takyl and the approach buoy of the Kerch Strait.

a target firing exercise was executed from a point northeast of Odessa. The discharged projectiles gave no sound; they were illuminated a bright red, but left no trail of flame or smoke; and, they traveled in straight trajectories.

a submarine (rough sketch included) 80 meters long, with white stripes

was engaged in diving exercises off Novorossiysk. Three dives were made; diving time for the last two was clocked at 30 seconds each.

S-E-C-R-E-T

50X1-HUM

05-25-16

STATE	X	ARMY	X	NAVY	#X	AIR	X	NSA	X	FBI	NIC	X
-------	---	------	---	------	----	-----	---	-----	---	-----	-----	---

(Note: Washington distribution indicated by "X"; Field distribution by "#".)

INFORMATION REPORT INFORMATION REPORT

S-E-C-R-E-T

50X1-HUM

Att. No.Subject

50X1-HUM

2

[redacted] report, [redacted] 50X1-HUM
 [redacted] on observations in the Black Sea area [redacted]
 [redacted] Observations
 include the following: at Novorossiysk, port controls and
 facilities, minesweepers, radar interference, floating
 cranes, patrol boats, MTBs, possible submarine chasers,
 [redacted] merchant vessels, and 50X1-HUM
 construction work at Mys Penay (N 44-41, E 37-53); and,
 at Odessa, port controls, five submarines, including
 [redacted] a small submarine in floating
 dry dock PD-19, two minesweepers, [redacted] 50X1-HUM
 three motor patrol boats, [redacted]
 [redacted], auxiliary vessel, [redacted] and merchant
 vessels. [redacted] four landing 50X1-HUM
 craft (two sketches included) were observed accompanying
 several small naval craft outside the harbor of Novorossiysk.
 The landing craft were 35-40 meters long, with a narrow
 beam, a slightly oblique bow without doors or gates, a
 bridge with a mast and antenna mounted forward, an engine
 house amidships, two winches on the afterdeck, and possible
 buoys for sea marking on the fantail. Report includes
 two annotated sketch maps of the harbor of Novorossiysk.

50X1-HUM

50X1-HUM

50X1-HUM

S-E-C-R-E-T

Attachment No. 1

SECRET

USSR: PORTS OF ODESSA AND NOVOROSIYSKODESSANavigation Information

50X1-HUM

Radar installation, approximately one mile East-Southeast of
Cape Tarkhankut (45° 21' N, 32° 30' E) observed rotating very slowly

[redacted] In front and to the right of the 50X1-HUM
radar, two tall poles (antennas?) were observed; as far as could be
ascertained, however, they were not connected by wire. [redacted] 50X1-HUM

[redacted] similar, in all respects, to the larger radar installation on
Ostrov Zmeinyy.

Port of ODESSA

50X1-HUM

Merchant Vessels observed in port:

50X1-HUM

IVAN SECHENOV, Soviet motorship

FASTOV, Soviet motorship, also seen at Sukhoy Liman [redacted]

KRISTO SMIRNENSKI, Bulgarian steamer

50X1-HUM

GIORGI DIMITROV, Bulgarian steamer

TIMIRYAEV, Soviet steamer, also observed [redacted] at Sukhoy Liman

[redacted]; it had an unloading crane on deck

50X1-HUM

IRKUTSK, Soviet steamer

RUDOL'F BLAUMAN (6MPT319), Soviet whaler, [redacted]

BEYA, Soviet steam ship

50X1-HUM

SECRET

50X1-HUM

SECRET

FROLOVO, Soviet motorship

ADMIRAL NAKHIMOV, Soviet passenger steamer

URGENCH, Soviet motorship

EKVATOR, Soviet steamer (passengers and cargo)

Other unidentified merchant vessels.

- 2 -

50X1-HUM

SECRET

SECRET

50X1-HUM

NOVOROSIYSK

Port of Novorossiysk

Naval Vessels Observed:

One vessel of the corvette type;

Four motor gunboats

these vessels have four whip antennas, about 3 meters tall, fore and aft of the bridge.

TUAPSE, a motor gunboat of 700 tons, observed in the naval floating dock (12).

Numerous motor boats and launches for use in the harbor and for coastal patrol service.

Merchant Vessels Observed:

POTI, Soviet tanker

KOMSOMOL, Soviet tanker, taking on a cargo of crude oil destined for a port

50X1-HUM

BUGURUSLAN, Soviet tanker

BONNY, tanker

GIUSEPPE D'AMATO, steamship, waiting to load cement

50X1-HUM

ARIA, steamer, carrying lumber.

Port Zone (Numbers refer to Attachment)

1. Repair yard: fairly good mechanical equipment
2. Floating dock
3. Three or four Soviet tankers undergoing repair

- 3 -

SECRET

50X1-HUM

~~SECRET~~

4. Area of quaying operations: blocks and coffer being placed, probably for restoration of the piers, (a) and (b)

50X1-HUM

5. Grain ^{c/}loading pier. The old chute is being replaced with a new one. A temporary chute is being used for grain-loading operations.

6. Fuel-loading pier. Underground pipes have been installed, terminating in 20 outlets, 10 on the right and 10 on the left. At the time of the report, only one outlet, 8 inches in diameter, was being used.- The fuel flows to the loading pier from the fuel tanks at (7),

four tanks of 20,000-ton capacity each.

50X1-HUM

For some time, an old motor tanker has been moored at the pierhead (c) to serve as a fuel depot.

At (7), there is a pumping station which, up to now, has had a maximum loading capacity of 800 tons per hour with two pumps (400 tons per hour for each pump). The loading capacity of this pumping station has recently been increased by the addition of a third pump, which should bring its capacity up to 1,200 tons per hour. The fuel is brought by rail from the production area.

7. Fuel tanks

8. Tanker serving as fuel depot

10. Railroad park; many tracks with a great number of tank cars standing on them

11. Naval zone and berths for naval vessels

12. Small naval floating dock

13. In the process of being extended, as per the sketch

14. Construction site for cement coffer for zone (4)

- 4 -

SECRET

50X1-HUM

SECRET

15. Searchlight
16. Searchlight and look-out station
17. Searchlight
18. Searchlight
19. Red Buoy.

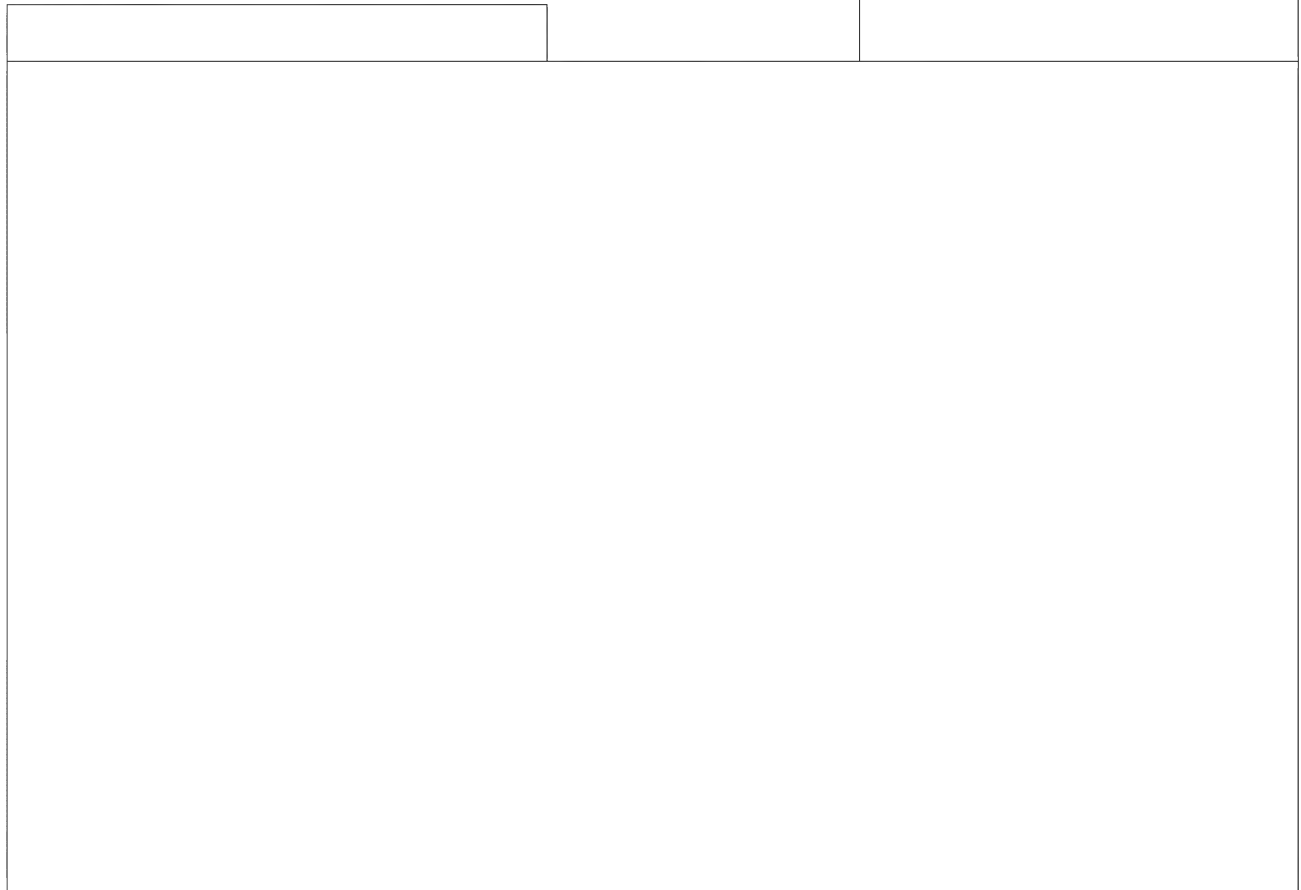
- 5 -

50X1-HUM

SECRET

SECRET

NOVOROSIYSK



Novorossiysk Bay

50X1-HUM

[redacted]
[redacted] observed heavy freighter traffic, primarily in oil. Soviet [redacted] tankers are given priority to berths at the pier over other arrivals.

The only naval vessels observed were light surface vessels, of which two left port every morning to remain at sea all day, cruising off Point Orizoiyevka [sic].

- 6 -

SECRET

50X1-HUM

50X1-HUM

SECRET [REDACTED]

Description: Low hull, 25-30 meters long; marked sheer in the deck; bow raked, but not sharply; transom stern; bridge forward of midships, rather square and angular (not streamlined); AA machine gun with four barrels, horizontal to the bow; probably a small gun astern; and a rail for depth charges, also astern. Around and aft the bridge, a line of whip antennas was observed. The two ships [REDACTED] 50X1-HUM [REDACTED] must have been very fast, because 50X1-HUM at a distance, the wake appeared higher than the bridge. (See attached sketch).

Seven or eight similar vessels were moored in the naval basin in the harbor.

At night, searchlights went into operation at the following points:

1. Point Doob
2. 3/4 mile north of Point Sheskhari
3. Point Sudzhuk, and
4. one mile southwest of Point Sudzhuk.

The searchlight at No 2 (above) was mounted on a truck running on rails; in daytime, it was withdrawn and placed in a small, masonry shelter.

In the small harbor half a mile north of Point Sheskhari [REDACTED] 50X1-HUM [REDACTED] three slip-like installations leading to the water. They did not 50X1-HUM appear to be of cement, but rather of beaten earth construction. They may be unloading points; but, since, upstream from them, [REDACTED] a small 50X1-HUM tracked vehicle, some military trucks, and an enclosure (possibly protecting some barracks located there) [REDACTED] 50X1-HUM

No military installations were observed on Mounts Nako and Doob, which

- 7 -

SECRET [REDACTED]

50X1-HUM

50X1-HUM

SECRET

does not eliminate the possibility that, given the nature of the terrain, some such installations may be there.

[redacted] a radar installation 50X1-HUM
near Point Orizoiyevka.

Port of Novorossiysk

Some stretches of the quays and wharves are undergoing repairs.

The shipyard appeared to be handling maintenance and repairs to Soviet tankers which have been placed in the floating dock moored near the east jetty of the harbor.

Just outside the naval basin, beyond the bridge over the Tsemes River [redacted] a surrounding wall guarded by armed sentries. On the road 50X1-HUM
along the harbor, there is fairly heavy traffic of trucks carrying timber, bricks, and other unloaded cargo.

50X1-HUM

ODESSA

Port of Odessa

[redacted] 50X1-HUM
[redacted] night firing practice.

SECRET

50X1-HUM

SECRET

[REDACTED]

Firing was executed from a point which might coincide with Point East, north of Odessa, and the projectiles traveled inside a 90-degree sector between northeast and southeast in vertical, oblique, and horizontal trajectories.

[REDACTED] 50X1-HUM

[REDACTED] there was no sound from the shots; that the projectiles, which were luminous like tracer shells (they emitted a bright, red light, but no flame), left no trail, [REDACTED] had absolutely straight tra- 50X1-HUM
jectories. [REDACTED] the trajectories for 2,000-3,000 meters, until they disappeared from sight, without observing any curvature in them.

SECRET

50X1-HUM

NOVOROSIYSKThe Roads at NovorossiyskNaval Vessels

[redacted] a submarine [redacted]

50X1-HUM

[redacted] was observed practice-diving in the area marked (A), where the water is approximately 12 fathoms deep. (See Sketch)

Description (numbers in parentheses refer to sketch): Length, approximately 80 meters; freeboard at bow, approximately 0.60 meters; hull and superstructure painted dark gray, with white stripes along the hull, [redacted] Conning tower 50X1-HUM (see sketch): height, 2 meters; width at base, 3 meters. The hatches, (1), (2), and (3) are watertight. (Only hatches (1) and (2) are visible in the sketch; they are closed by means of four "handwheels.") Horizontal rudders (4): from the point where they are attached to the hull to their outer extremity, one meter; one still painted with red lead. Periscope (5) (see sketch). Radio antenna (8): a whip antenna (observed through field glasses); estimated height, 2.5 meters. Hatches (6) and (7), very large (see sketch). Number of test dives: 3.

The first dive was made at too steep an angle. The submarine surfaced again almost immediately, and then performed a second and a third dive in perfect trim. [redacted] when the ship submerged, it stopped as soon as it had reached periscope depth. The time for the second and third "quick" dives was clocked at 30 seconds. 50X1-HUM

- 10 -

SECRET

50X1-HUM

SECRET

50X1-HUM

The area in which [redacted] its test dives was patrolled by two patrol cutters, [redacted]

Military Targets (See attached chart)

At the elevation of 304 meters, an object (B), approximately 6 meters wide and 10 meters high (see sketch).

At C, a hangar.

The entire area was frequently flown over by helicopters about to land.

Kerch Strait

Military Targets

At the elevation of 340 meters, on the east coast of Crimea, between Cape Takil' and the approach buoy, a radar antenna was observed (see sketch), and, near by, four or five whitish buildings with red tile roofs.

Passing by the airfield near Cape Fonar', [redacted] the tails of 50X1-HUM many aircraft, some under cover.

50X1-HUM

- 11 -

SECRET

Sanitized Copy Approved for Release 2010/10/21 : CIA-RDP80T00246A054100440001-2

Page Denied

Next 1 Page(s) In Document Denied

Attachment No. 2

50X1-HUM

Information on Ports of Novorossiysk and Odessa, USSR

A) NOVOROSSIYSK PORT, USSR

C/1 [] ship's radio may be used in Novorossiysk

50X1-HUM

Port. Radios of foreign ships are not sealed.

" There were about 10 or 12 small craft of the coast guard in the dock between piers 8 and 9. Two of these craft were of the very fast class (the operator did not specify numbers or designators, or draw their silhouettes). These vessels (which the operator compared to patrol cutters []

50X1-HUM

are equipped with radar which is enclosed in plastic shells.

C/1 [] work is in progress at the pier marked No. 10 on the attached sketch.

50X1-HUM

C/1 The head of the pier marked No. 7 (see attached sketch) is marked by two steady red lights, placed on its sea end.

" The piers indicated in the sketch as 3, 4, and 5 are semi-destroyed.

" The known wooden barge indicated as No. 8 is moored to the head of the Petroleum Pier. The motor tankers which intend to load come alongside Pier 8 and the pierhead, as well as the barge mentioned.

" The operator confirmed the existence of the grain elevator

[] note: this word is sometimes used to mean fuel storage tank] on pier 6. 50X1-HUM

SECRET

50X1-HUM

~~SECRET~~

c/1

[redacted] a large steel openwork tower rises on the south side of Novorossiysk Bay; its height is not less than 50 meters. There is a filament and green light (visible about 10 miles) at the top of this tower. It is probably a tower with a light for navigational ranging [redacted]

50X1-HUM

[redacted] such a heavy and high tower is excessive for its supposed purpose.

50X1-HUM

This tower has supposedly been installed for six or seven months [redacted]

50X1-HUM

" On the western side of the bay, [redacted] the existence of an airfield with several aircraft on the ground. [redacted]

" [redacted] this airfield the existence of a large antenna (probably radar). It is a sort of vertical openwork tower of ellipsoidal shape, directly sunk into the ground and not on a masonry structure; its approximate dimensions are: horizontal span, 50 meters [sic]; height, 20 meters; the operator did not see it operate, did not see it rotate, nor could he confirm its existence through observation on his own radar.

50X1-HUM

[redacted] did not observe any ramps or equipment which could be used to launch missiles.

[redacted] an appreciable relaxation in relations, both with the maritime authorities and the auxiliaries of the various services (pilots, line handlers, shipping agencies, etc.). Cameras may be used in town. The standard of living is quite low for the common

50X1-HUM

SECRET

SECRET

50X1-HUM

people. Shops are poorly stocked and with poor quality goods; there are few automobiles; a widespread sense of poverty is felt everywhere.

Place of observations: Novorossiysk

50X1-HUM

A) Information Collected Underway

B/1 a gunboat with no lights showing was motionless in the water, at the entrance to Novorossiysk Bay.

50X1-HUM

B/1 the Soviet merchant ship USOLYE of 3,000 to 4,000 tons, loaded, was met at Saint Stephen, Sea of Marmara, headed westward.

50X1-HUM

B/1 the Bosphorus, the steamship MARECHAL of about 4,000 tons, about 30 years old, loaded, headed westward.

50X1-HUM

B/1 at latitude 43 30 North, longitude 35 15 East on course 62 degrees, sighted two reddish rockets at approximately 30 degrees to starboard.

50X1-HUM

B) Novorossiysk Port

50X1-HUM

There were no formalities, and no variation from preceding reports regarding bill of health, inspection, passes and shore leave.

B/1 Naval vessels. Soviet minesweepers Ob, Irtich, Alurn, Angara, and three other minesweepers

50X1-HUM

- 3 -

SECRET

50X1-HUM

~~SECRET~~

[REDACTED]

Soviet floating shear cranes. MLB 3

MLB 2

MLB 2

MB 66 (about 10 tons?).

Gooseneck floating cranes. Six berthed at the Lumber Pier.

Ordinary barges (moored between the Lumber Pier and Petroleum Pier).

[REDACTED] 50X1-HUM

Fast Patrol Boats On Duty.

[REDACTED] 50X1-HUM

B/1 Movement of Naval Vessels

50X1-HUM

[REDACTED] MTB [REDACTED] departed (two sets of 20-mm AA guns forward and one twin mount aft, two torpedo tubes, and depth bombs; these features apply to the vessels which follow).

50X1-HUM

50X1-HUM

[REDACTED] MTB [REDACTED] entered;
 [REDACTED] MTB [REDACTED] departed;
 [REDACTED] MTB [REDACTED] departed;
 [REDACTED] MTB [REDACTED] entered;
 [REDACTED] MTB [REDACTED] entered;
 [REDACTED] MTB [REDACTED] entered (smaller than the others and unarmed).

50X1-HUM

50X1-HUM

[REDACTED] MTB 295 entered;

50X1-HUM

- 4 -

~~SECRET~~

~~SECRET~~

[redacted] 50X1-HUM

[redacted] MTB 293 entered; [redacted]

[redacted] Corvette [redacted] entered;

[redacted] Corvettes [redacted] departed;

they are armed with one gun of about 105-mm and depth charges;

[redacted] Corvette [redacted] was stopped outside the 50X1-HUM

harbor and had a canvas target in tow. 50X1-HUM

B/1 Merchant ships present in harbor

[Summary:] Twenty-five ships are mentioned, of which 12
were Soviet petroleum tankers. No cargoes specified.

A) INFORMATION COLLECTED UNDERWAY

1.) Radar interference

C/1 Arriving in Novorossiysk Outer Harbor during the dark hours, our radar operators were amazed to find that the radar scope did not reflect any pips, but merely showed luminous dots, discolored areas, and the outline of the shore appeared as barely visible for only a few seconds. The phenomenon was not limited to a given sector of the scope but encompassed 360 degrees. They therefore deduced that it was not a matter of interference from some other radar set nearby but was caused by absorption of the radio waves emitted [redacted]

The radar, [redacted] was sweeping at a range of four miles at that time.

50X1-HUM

- 5 -

~~SECRET~~

50X1-HUM

SECRET

B) NOVOROSSIIYSK PORT, USSR

1) Petroleum Pier - Storage Facilities

C/1 As is known, half the Petroleum Pier is of masonry and the other half is made up of an old German merchant ship, sunk stern-to the pierhead. There is no storage depot of raised tanks in the petroleum area. The product is transported to the place either by railroad trains arriving from inland, or by Soviet motor tankers which have brought it from other Black Sea ports. Near the shore end of the pier there are underground tanks which hold a reserve to be used in case the trains or ships are late. However, their capacity is low and quickly exhausted. The system used for loading motor tankers is not regular, alternating between the high of loading when the railroad tank cars or ships arrive, from which the product is tapped directly, to a low of being suspended without notice if the trains or ships are late.

- 6 -

SECRET

50X1-HUM

~~SECRET~~

50X1-HUM

[redacted]
[redacted]
[redacted] motor tankers called in Novorossiysk

[redacted] The freighter FRUMENTO loaded lumber.

50X1-HUM

2) Novorossiysk Bay - Work in Progress

c/1 [redacted]

50X1-HUM

Point Penai, where some low wstructures of shed or barrack type were being constructed. Near this area there is a small pier which often berths the fast patrol boats used in coast guarding; the western breakwater, where two dredges were working; abreast of the village which stands at 3/4 of a mile southward of the western breakwater, earth was being excavated and dredged in the water area opposite it.

50X1-HUM

3) Naval vessels

c/1 Besides a good number of fast patrol boats, partly berthed in harbor and partly employed in the bay and just outside it, the operator noted some small units berthed in the naval basin, which [redacted] "gunboats" with reference to their dimensions only. These vessels frequently departed and headed westward to sea; in all they numbered about ten. On one occasion four landing barges joined company with these vessels, which barges the operator described as follows:

- 7 -

50X1-HUM

~~SECRET~~

~~SECRET~~

50X1-HUM

[redacted]

length: 35 to 40 meters

beam: not estimated, but narrower than usual

bow: slightly oblique, not equipped with doors or gates

color: very dark gray, so that at a distance and with haze they blended with the horizon

features: conning cabin and wheelhouse forward, one mast with radar antenna;

engine housing amidships;

two winches on the after part;

On the fantail there were conical or truncated-conical bodies, probably buoys for sea marking which were to be moored at some point.

ODESSA PORT, USSR

[redacted]

50X1-HUM

A/1

[redacted]

A/1

[redacted]

the following naval vessels in harbor:

five submarines berthed to the quay

[redacted]

50X1-HUM

[redacted]

- 8 -

~~SECRET~~

50X1-HUM

[redacted]

SECRET

[REDACTED]

one small submarine in a floating drydock, the latter bearing designation PD-19-TSHE KHOD.

[REDACTED]

50X1-HUM

two minesweepers

[REDACTED]

two motor patrol cutters (fast motor patrol boats), armed

with a single AA gun forward:

[REDACTED]

50X1-HUM

one motor patrol cutter, unarmed,

[REDACTED]

one auxiliary vessel of tug type

[REDACTED]

[REDACTED]

training ship EQUATOR.

two training ships: ex-COLOMBO and TOVARICH.

Other small vessels, unidentified.

A/1 Merchant ships observed in harbor

[REDACTED]

GENITO, carrying citrus fruit

50X1-HUM

LINCE, carrying citrus fruit

FECONDO, carrying coal

ALGOL, carrying coal.

[Other ships' cargoes unidentified]

50X1-HUM

A/1

[REDACTED]

there is a black market in the port area.

Cigarettes, stockings, women's underwear, etc. are most sought.

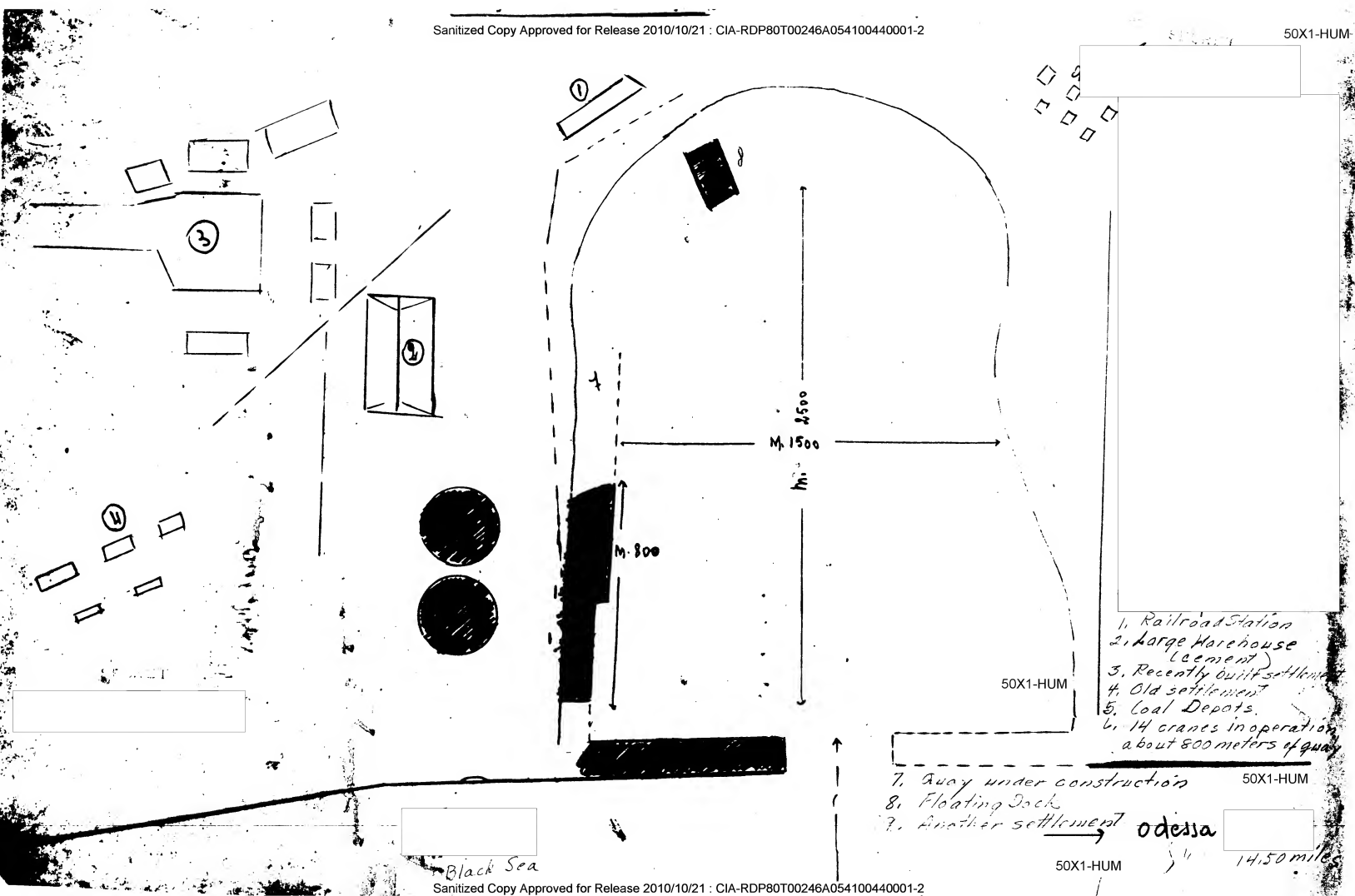
SECRET

[REDACTED]

50X1-HUM

Page Denied

Next 2 Page(s) In Document Denied



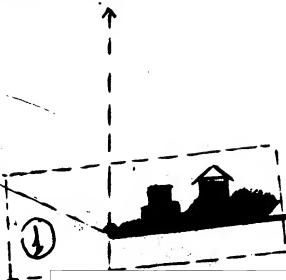
~~Observation area~~

Daytime observation
local time. Visibility: fair. Distance: 4 1/2 miles

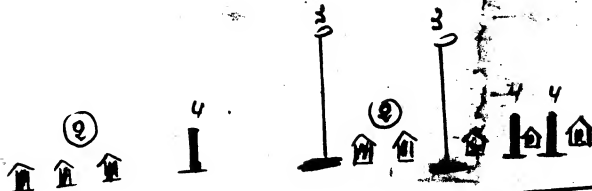
50X1-HUM

50X1-HUM

Capo Fontana



About 7 miles from Odessa
Black Sea



50X1-HUM

Odessa

50X1-HUM

50X1-HUM

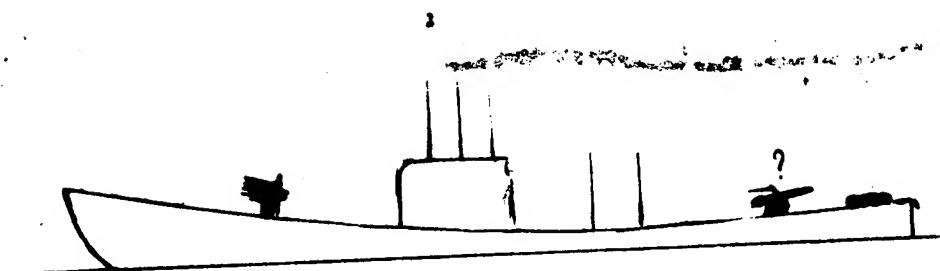
50X1-HUM

1. Area under observation: no tall installations. Probable post of observation. Area of completely open, empty country
2. Scattered settlements along the coast from Odessa half covered with woods and lone trees.
3. Very large, tall, vertical radio antennas (RTF)
4. Smoke stacks, presumably

Page Denied

Next 3 Page(s) In Document Denied

SECRET



50X1-HUM

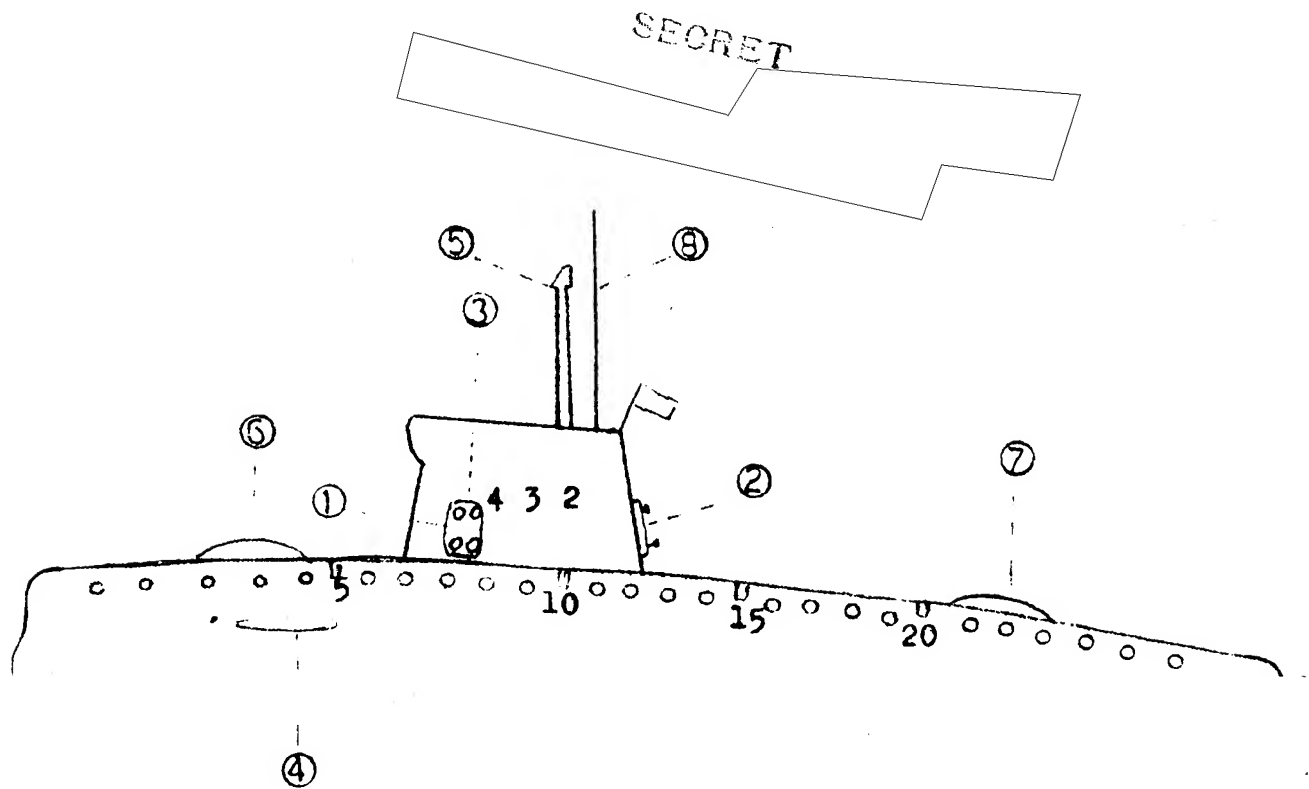
Sanitized Copy Approved for Release 2010/10/21 : CIA-RDP80T00246A054100440001-2

50X1-HUM

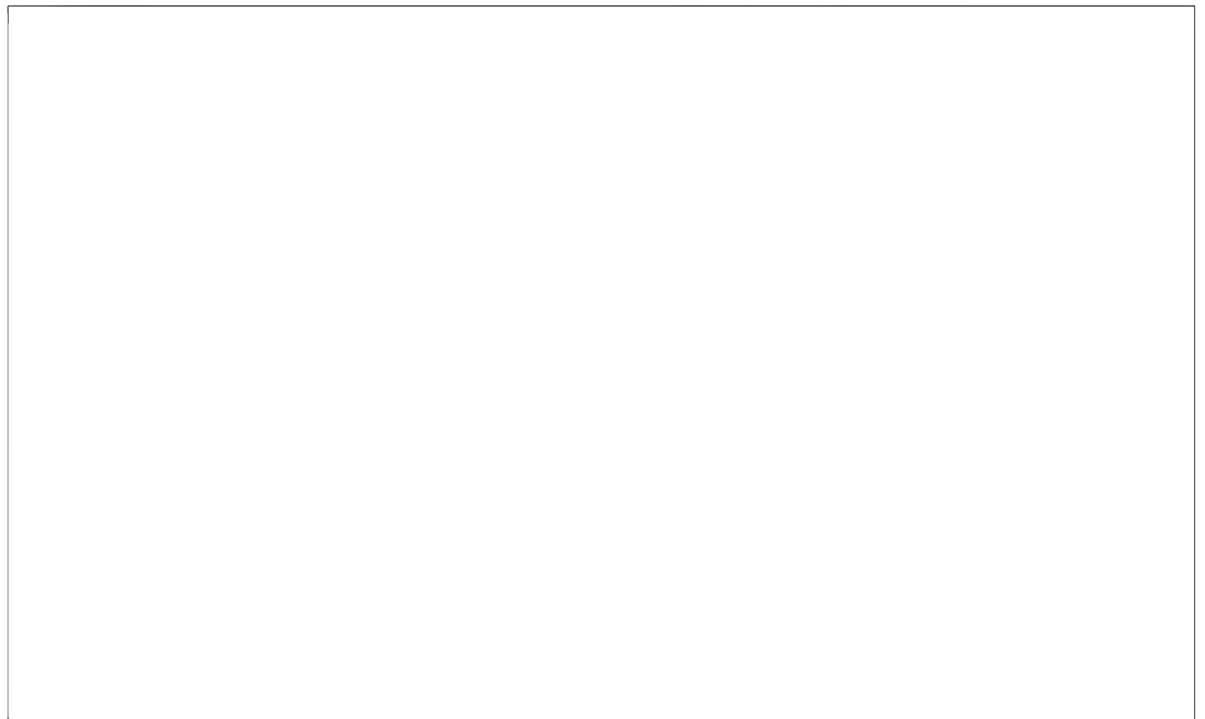
Page Denied

Sanitized Copy Approved for Release 2010/10/21 : CIA-RDP80T00246A054100440001-2

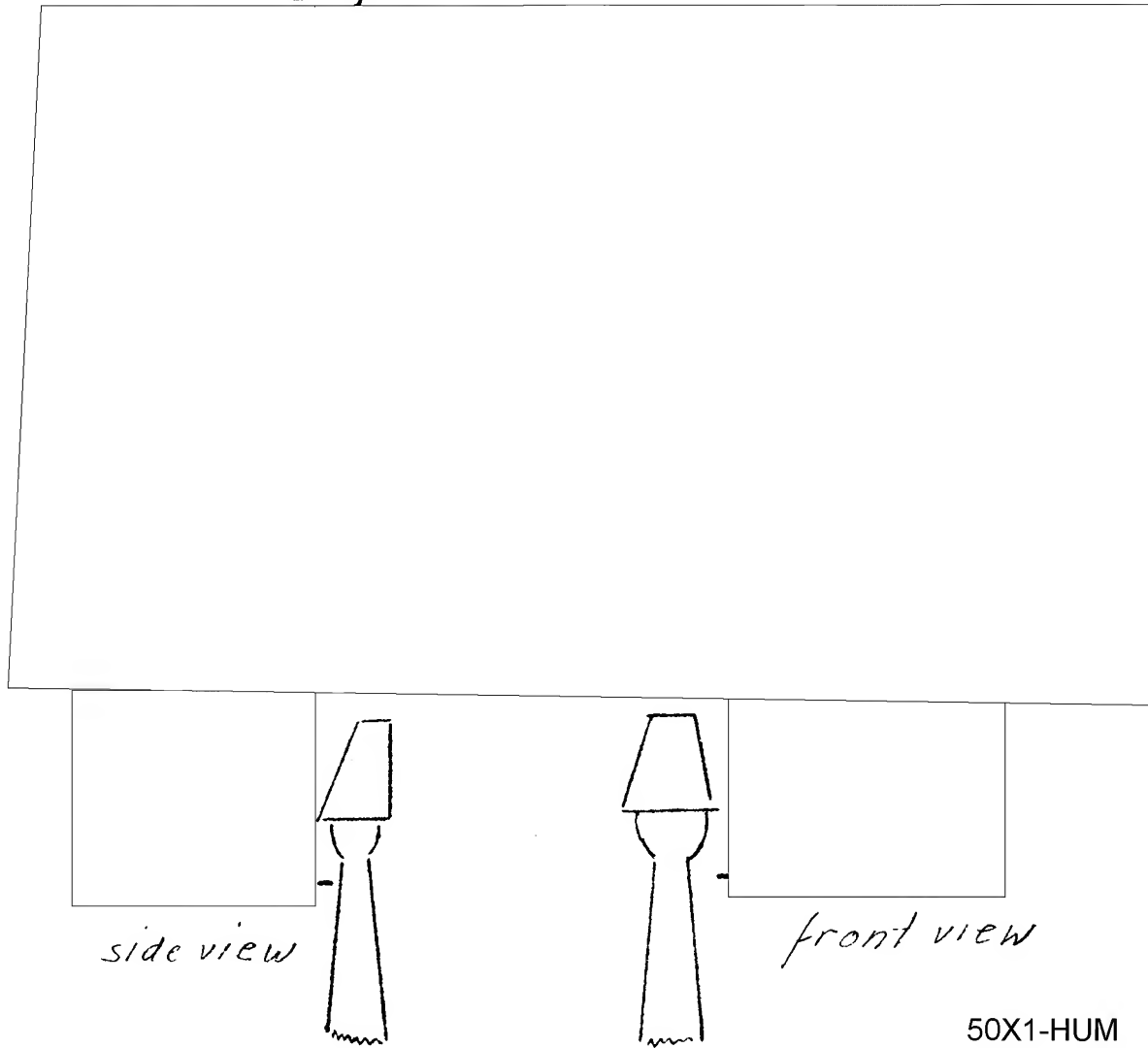
50X1-HUM



50X1-HUM



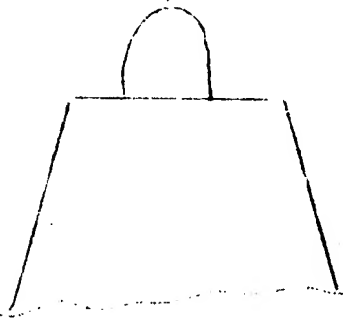
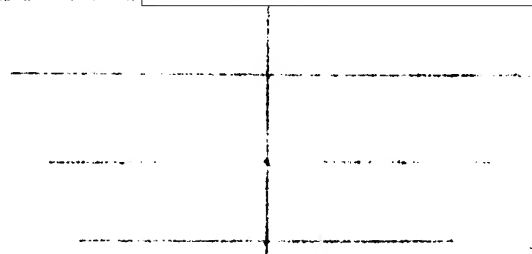
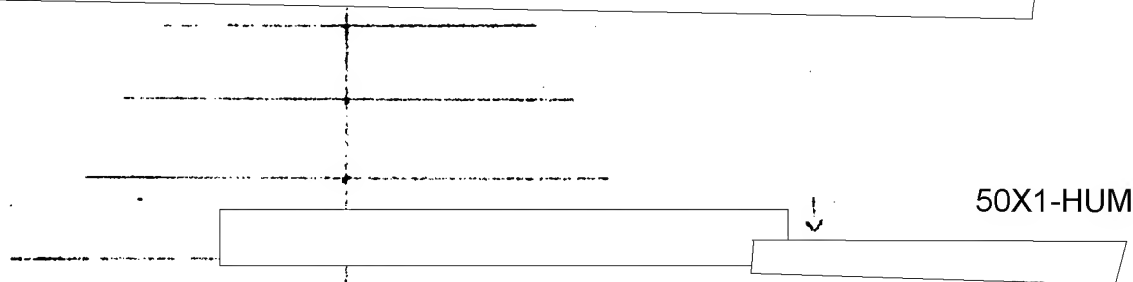
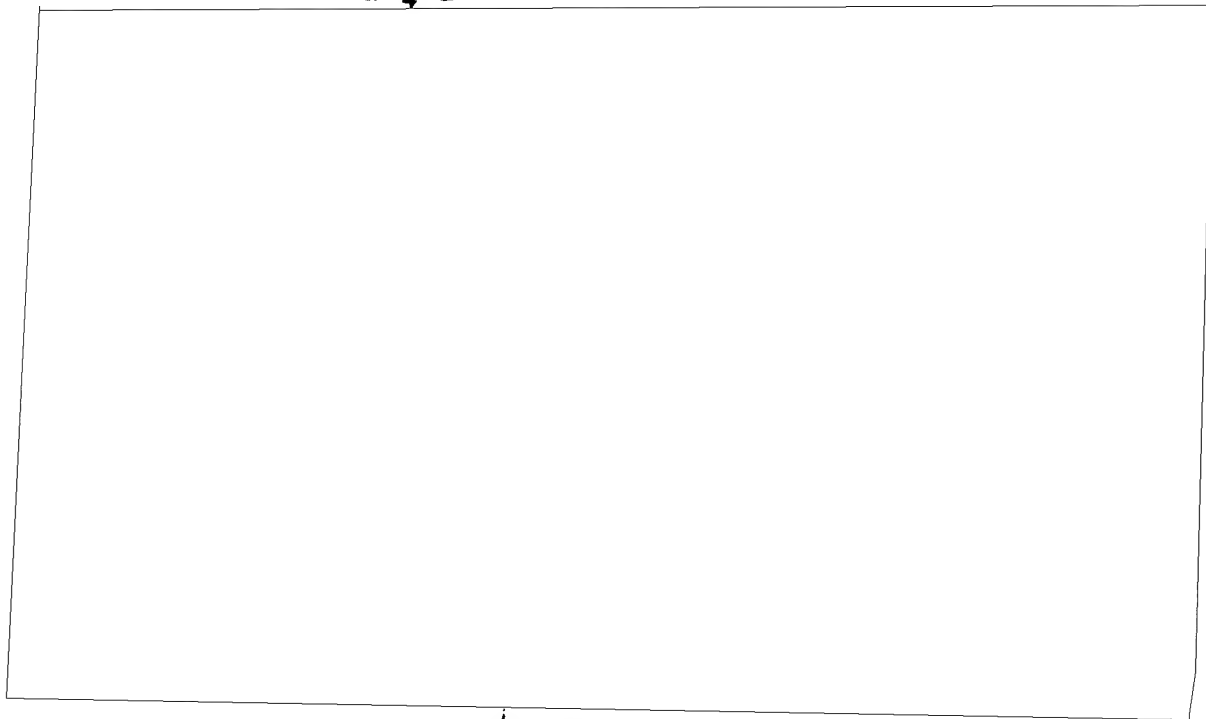
- 3 -



50X1-HUM

- 4 -

B/1

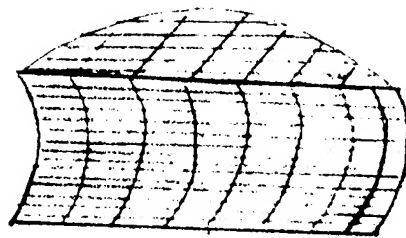


50X1-HUM



B/1

B/1



50X1-HUM

50X1-HUM

50X1-HUM

НОВОРОССИЙСК

A

50X1-HUM

C

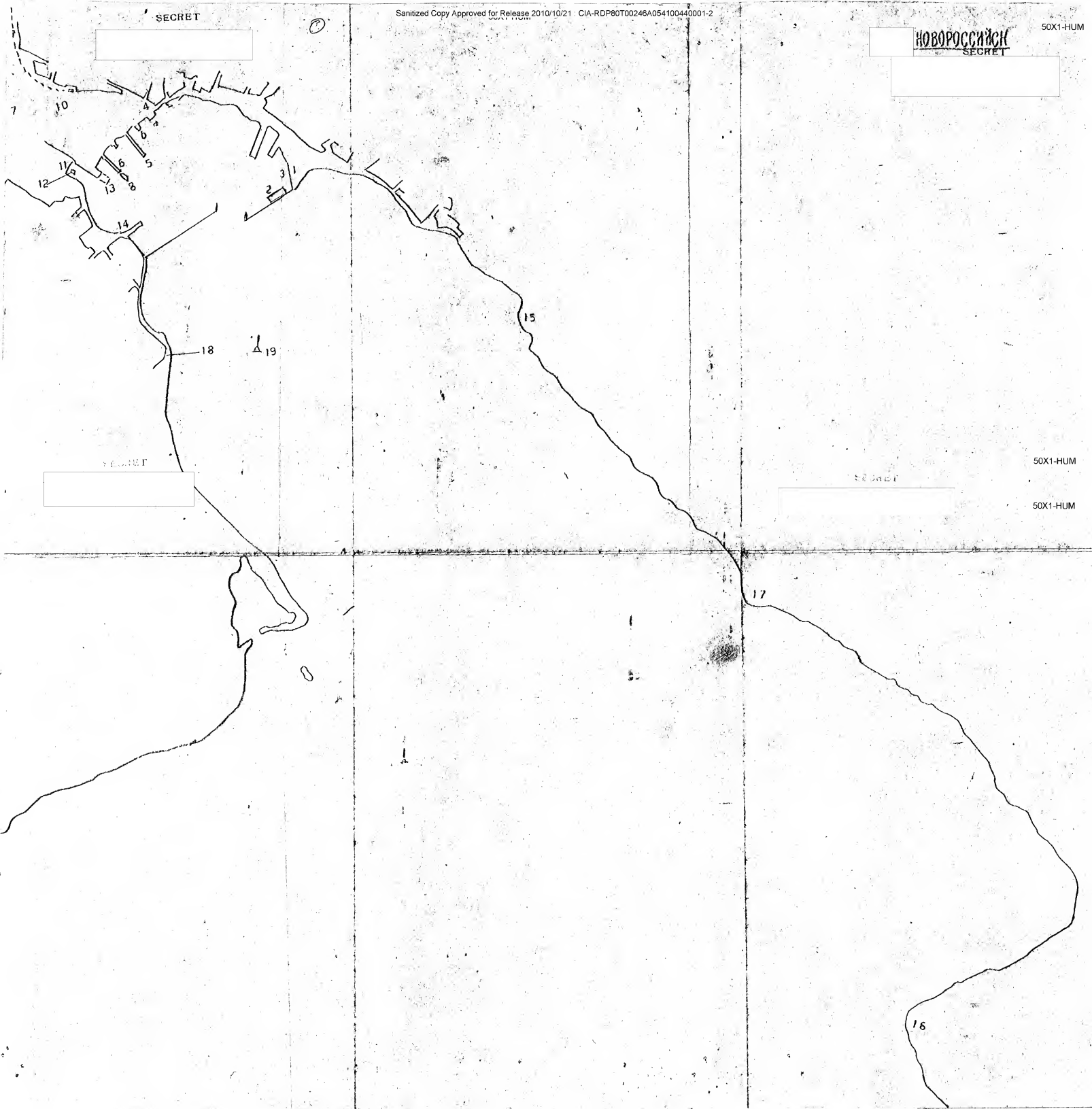
B

SECRET

Sanitized Copy Approved for Release 2010/10/21 : CIA-RDP80T00246A054100440001-2

НОВОРОССИЙСК
SECRET

50X1-HUM



50X1-HUM

50X1-HUM

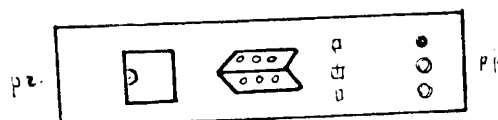
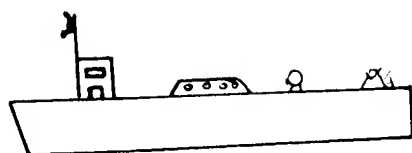
Sanitized Copy Approved for Release 2010/10/21 : CIA-RDP80T00246A054100440001-2

Sanitized Copy Approved for Release 2010/10/21 : CIA-RDP80T00246A054100440001-2

Page Denied

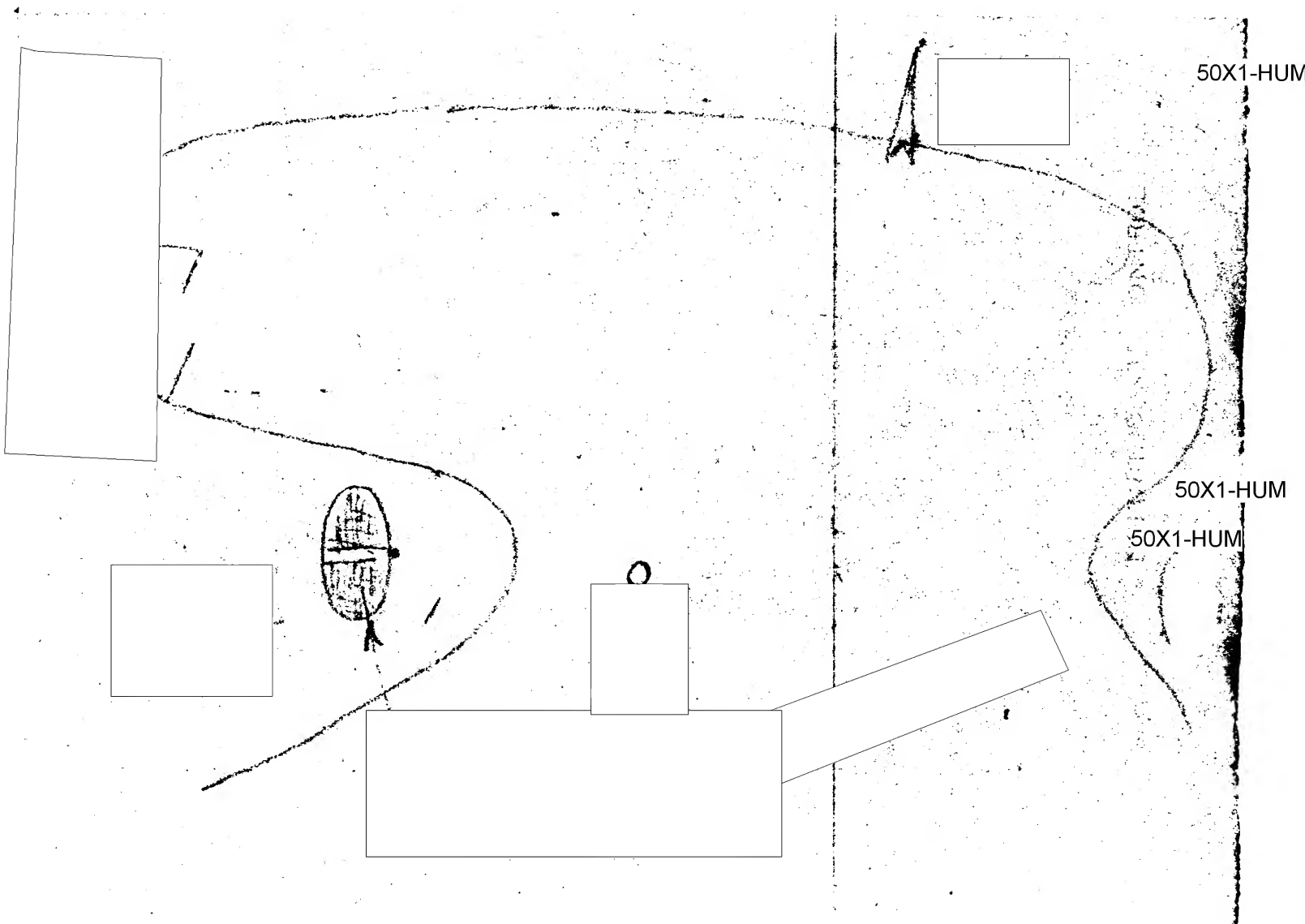
Next 7 Page(s) In Document Denied

SECRET



Page Denied

Sanitized Copy Approved for Release 2010/10/21 : CIA-RDP80T00246A054100440001-2



Sanitized Copy Approved for Release 2010/10/21 : CIA-RDP80T00246A054100440001-2

RDP8010024
УДК 62-50

RDP80T0024